

Whitney Dam and Whitney Lake

OWNER

The U.S. Government. Operated by the U.S. Army Corps of Engineers, Fort Worth District.

ENGINEER (Design)

U.S. Army Corps of Engineers.

LOCATION

On the Brazos River in Hill and Bosque Counties, 38 miles upstream from Waco, and 5.5 miles southwest of Whitney.

DRAINAGE AREA

17,656 square miles contributing.
8,950 square miles noncontributing.

DAM

Type	Concrete gravity and earthfill
Length	17,695 ft
Maximum height	159 ft
Top width	Embankment 34 ft and spillway 28 ft

SPILLWAY

Type	Ogee
Length (net at crest)	680.0 ft
Crest elevation	533.0 ft above msl
Control	17 tainter gates, each 40 by 38 ft

OUTLET WORKS

Type	16 conduits, each 5 by 9 ft
Invert elevation	448.83 ft above msl
Control	Gates operated from tunnel

POWER GENERATION FEATURES

Number of units	2
Total capacity	30,000 kw

AUTHORIZATION

Federal:	Flood Control Act, August 18, 1941. Flood Control Act, December 22, 1944. Civil Functions Appropriation Act 1953.
State:	None. Brazos River Authority is considering purchase of 50,000 acre-feet of storage space for water supply.

RESERVOIR DATA (Capacities based on surveys made in 1959)

FEATURE	ELEVATION (FEET ABOVE MSL)	CAPACITY (ACRE-FEET)	AREA (ACRES)
Top of concrete dam	584.0	—	—
Top of earth embankment	580.0	—	—
Maximum design water surface	573.0	2,100,400	51,190
Top of flood-control pool	571.0	1,999,500	49,820
Spillway crest (top of ultimate power pool)	533.0	627,100	23,560
Top of interim power pool	523.0	427,400	16,450
Invert of lowest intake	448.83	4,270	475
Streambed	425.0	0	0
Sediment reserve and power-head storage space	520.0	379,100	—

GENERAL

Construction started	May 12, 1947
Dam completed	April 18, 1951
Deliberate impoundment began	December 10, 1951
Power generation began	June 25, 1953
Marketing agency for power	Southwestern Power Administration
General contractor	L. P. Reed Inc.
Estimated project cost	\$41,795,000

